

DAILY ACTIVITY REPORT

Report # 4

DATE Jan 24, 2017

S M T W TH F S

Field Investigation Manager: Tim Thompson

WEATHER Bright Sun Clear to Partly Cloudy Overcast Rain

TEMPERATURE °F <32° 32-45° 45-60° 60-70° 70-85°

WIND Still Mod. High

HUMIDITY Dry Mod. Humid

DAYTIME TIDES

Date	Day	Time	Hgt
01/24	Tue	04:11 AM	10.62 H
01/24	Tue	09:15 AM	7.81 L
01/24	Tue	01:52 PM	10.35 H
01/24	Tue	08:57 PM	-0.01 L

TASK: ☐ Industrial Area Soils ☐ Industrial Area Groundwater ☐ Surface Water ☒ Sediment ☐ MIS

SUBCONTRACTORS/VISITORS ON SITE: Tim Thompson (SEE); David Browning (BES); Kim Hawkins (HDR); Hailey Fitterer (HDR), Susannah Edwards (Ecology), Dale Dickinson (MSS)

EQUIPMENT ON SITE: MSS R/V Nancy Anne, MSS power grab

WORK PERFORMED (INCLUDE ANY SAMPLES COLLECTED):

1. Completed grab samples at FSP-designated stations. Grab collection data is provided in Table 1.
2. A total of 9 individual grab stations were collected.
3. Each grab sample photographed and geotechnical notes recorded in field notebook (see attached notes).
4. Archived samples (16 oz) collected at each individual sampling location.
5. Equal volumes collected from each grab and composited into a single sample.
 - a. Station and assigned blind lab IDs are provided in Table 1.
6. Composite samples held on ice and under COC secured at SEE for delivery to ARI on 1/25.
7. Archive samples transferred to CH2M personnel for transport to EPA Manchester Lab (see attached COC)

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS)

- Navigation checks done at NAID Channel Marker prior to initiating sampling.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Tailgate Meeting Held ☒

- H&S briefing held on-board the R/V Nancy Anne.
- Topics included slip-trip-fall, proper PPE including PFDs, person-overboard procedures, overhead hazards and pinch points.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

- No problems encountered.

SPECIAL NOTES:

- J9 and J10 grabs consisted largely of the Phase III cap gravel mix, with some deposition of silt. See Figure 1.

TOMORROW'S EXPECTATIONS:

- Transport composite samples to ARI
- Split, photograph and log cores collected on 1/20/2017 at ARI in Tukwila, WA.

ATTACHMENTS:

- Figure 1. Grab Sample Photos for 1/24/2017
- Table 1 EHO Core Collection Data
- Field Notebook Pages for 1/24/2017
- Chain-of-custody form for transport of individual archive samples to EPA Manchester lab.

PREPARED BY: Tim Thompson

SIGNATURE: Filed electronically.

Figure 1. Grab Sample Photos 1/24/2017

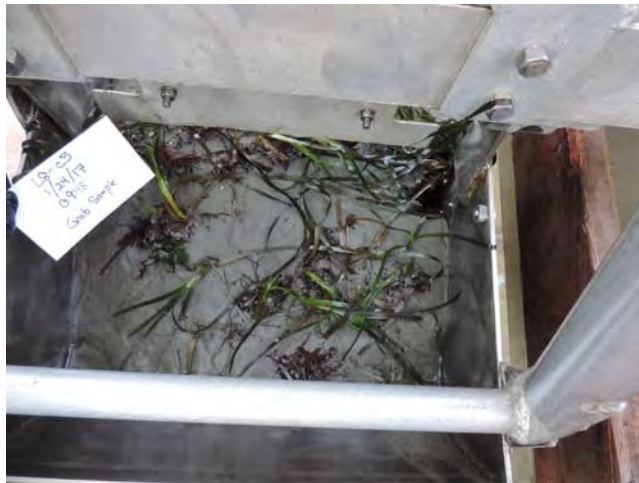


Figure 1. Grab Sample Photos 1/24/2017 (continued)

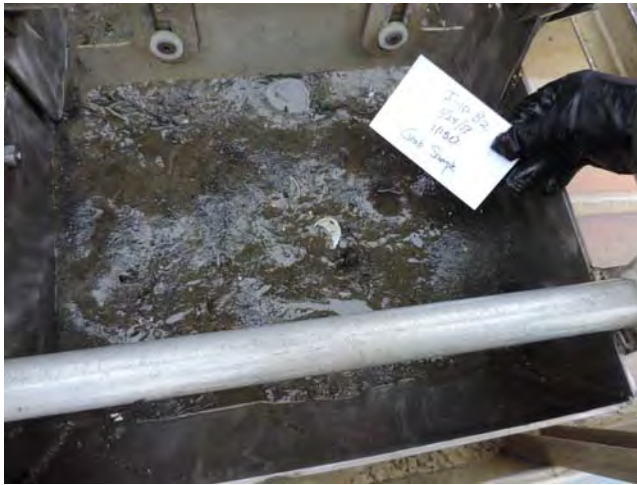


Table 1. EHOU Grab Sample Collection Locations Jan 23, 2017

2016 Grid Cell Station	Collection Date	Collection Time	FSP Target Sampling Locations		Actual Sampling Locations		Measured Water Depth (ft)	Tidal Height at Time of Collection	Corrected Collection Depth (ft MLL)	Depth of Sediment in Grab (cm)	Hydrocarbon Present?	Blind Sample ID	Blind Field Replicate ID
			Latitude (NAD 83 N)	Longitude (NAD 83 W)	Latitude (NAD 83 N)	Longitude (NAD 83 W)							
L8-e2	1/24/2017	9:09:49	47°37.14217	122° 30.06017	47°37.14205	122° 30.06018	20.2	8.1	-12.1	25	yes	012417001	---
L8-a4	1/24/2017	9:32:10	47°37.12483	122° 30.10583	47°37.12499	122° 30.10567	13.7	8.2	-5.5	17	no		
L8-c5	1/24/2017	9:48:43	47°37.11683	122° 30.08100	47°37.11701	122° 30.08116	11.1	8.3	-2.8	19	no		
J9-b3	1/24/2017	10:15:16	47°37.09417	122° 30.21517	47°37.09423	122° 30.21484	28.2	8.4	-19.8	25	no	012417002	012417003
J9-b4	1/24/2017	10:35:06	47°37.08233	122° 30.21317	47°37.08238	122° 30.21259	30.4	8.7	-21.7	25	no		
J9-c3	1/24/2017	11:00:09	47°37.08833	122° 30.19733	47°37.08806	122° 30.19681	17.4	9	-8.4	22	no		
J10-b2	1/24/2017	11:50:39	47°37.05550	122° 30.21367	47°37.05540	122° 30.21341	33.4	9.5	-23.9	21	no	012417004	---
J10-b4	1/24/2017	12:06:30	47°37.04467	122° 30.20817	47°37.04443	122° 30.20836	32.4	9.7	-22.7	18	no		
J10-c2	1/24/2017	12:22:16	47°37.05633	122° 30.19783	47°37.05620	122° 30.19743	30.3	9.9	-20.4	22	no		

1/24/12

(28)

0700 Ovsite
Dickinson
Thompson

Set up boat

0815 On board
Haily Fitterer
Tim Hawkins
Dae Browning
Susanna Edwards (Ecology)

0820 HHS Meeting
- Sampling Plan
- J94 J10 potential AIBs
- Decan fluid safety
Slip-trip-fall
Overhead hazards
Pinch points
Man Overboard

0845 Underway
0857 Nav Check
47 37 19.16052N
122 29 50.72922W

L8

(29)

012417001 Sample ID

L8-22

Date 1/24/12
Time 0909
Depth 20.2
Lat 47 37 08.52318N
Lon 122 30 03.61074W
Recovery 25

Note: I inadvertently listed
sample date for some samples
as "2016". Will need to
make note to lab on that

Soft brown organic

Slightly fine sandy clayey silt
Moderate to strong H₂S
Polychaetes

Urea, Glycerol, Glycerol & lea
Several 1-2mm fluorescent sh. At
sed/water interface & subsurface

L8-a4
 Date 4/24/17
 Time 0922
 Depth 13.7 ft.
 Lat 47 37 07.49928
 Lon 122 30 06.34032
 Recovery 17 cm

Slightly silty fine sand
 trace scattered gravel (eratic)

Gammaria, barnacles,
 Sphaerochaetopterus medium
 12cm down wet fine sandy / fine
 gravel w/ trace silt
 no shen or blebs observed
 basal gravels subrounded

Archive + composite samples
 collected.



L8-C5

Date 4/24/17
 Time 0948
 Depth 11.1 ft.
 Lat 47 37 07.02036
 Lon 122 30 04.86978
 Recovery 19 cm

Silty fine sand

Belgrass - live w/ turins present.
 Gammaria
 Nereid worms, gammarid amphipods
 Sphaerochaetopterus
 Est. 20-30 turins / 0.5 m²
 Capitellid (?)
 No shen or blebs observed.

Shells appearing on surface of
 composite sample. 3-5mm diameter

L8-C5 Archive 16 oz

012417001 Composite

Grain Size	} 16 oz.	Mercury	} 4 oz.
PAH-PCP		TS-TOC	
Archive			

J9-b3

J9

Date 1/24/17

Time 10:15

Depth 28.2

Lat 47 37 05.65398 N

Lon 122 30 12.89028 W

Recovery 25 cm

H₂S smell.

Wet, slightly brown

6-7 cm recent deposition of slightly
fine sandy silty clay. Open shell
brackish ^{mostly} slightly sandy silty clay
(30-40% shell)

Brackish & mussel shells, Gracilasteria,
Nereis naumanni,

No odor or shovels (PAHs)

J9 Sample ID 012417002

J9 Field Replicate ID 012417003
For the field replicate assigned
a "blind" collected time of 1330 hrs.

J9-b4

Date 1/24/17

Time 10:35

Depth 30.4 ft

Lat 47 37 04.94305 N

Lon 122 30 12.75554 W

Recovery 25 cm

J9-b4 Archie collected 1602, jar
H₂S smell - strong

Crab shrimp.

Wet, soft, slightly fine sand clayey silt
Dark sand of surface
Looks shell layers of
Disarticulated horse clam shells

No shovels or oil present.
Nail present.

J9-c3

Date 01/24/2017

Time 11:00

Depth 17.4' (w)

Lat 47° 37' 05.28366' N

Lon 122° 30' 11.80866' W

Recovery 22 cm

Fine gravel < 2mm on sediment
surface. Some shell hash.

Silt on surface to 3 mm

Medium-to-coarse sand w/ trace silt.
Lenticular marks

Strong H₂S

Possible Phase III cap material?

Rounded sub-gravel Photo taken

J9 Composite 012417002

Grain Size

PAH/PCPs

Archive

16 oz.

Mercury

TS/TOC

24 oz

J9 Field Dup 012417003

Grain Size

PAH/PCPs

Archive

16 oz.

Hg

TS/TOC

24 oz.

Lunch break on shore.

11:45 Back on site

J-10

012417004

J10-b2

Date 1/24/17

Time 11:50

Depth 33.4 ft

Lat 47° 37' 03.32400

Lon 122° 30' 12.80430

Recovery 21 cm

Fine black sand on surface. In
a thin veneer of fine oxic silt.

Material below trace sand silty
wet clay to ~4-5 cm. From 75 cm
rounded coarse sand, fine gravel. Similar to
Phase III cap material

J10-b2 archive collected

J10-b4

Date 1/24/17

Time 12:06

Depth 32.4

Lat 47 37 02.66596

Lon 122 30 12.50148

Recovery 18cm

Phase III ranked fine gravel mixed with fine sand and some silt

Almost exclusively Phase III material to the bottom of the grab. Toward the bottom very clean gravel (no silt)

One solitary peanut worm present.

J10-b4 Archive (16 oz) collected

~1 L composite sample collected.

J10-c2

Date 1/24/17

Time 12:22

Depth 30.3

Lat 47 37 03.37188

Lon 122 30 11.84604

Recovery 22cm

J10-c2 archive sample collected wood in sample.

The vessel of loose, wet silt ~ 4-5mm

Over wet, soft, trace fine sand clay silt. to ~ 12cm. Phase III, caps material from 12-18cm (bottom of grab).

Slight shear in composite

J10 = 0124170004

Grain Size

PAH/PCP

Archive

MS/MSD

1602

Hg

TOC/TS

402.

12:32 NAV Check

47 37 19.14828N

122 29 50.69886W

Chain of Custody Record & Laboratory Analysis Request



Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number:		Turn-around Requested:		Page: 13 of 3	
ARI Client Company: EPA - Region 10		Phone:		Date: 01/24/2017	
Client Contact: Helen Bottcher				Ice Present?	
Client Project Name: East Eagle Harbor 2016 Monitoring				Cooler Temps:	
Client Project #:		Samplers: HDR/SEE/MSD		Analysis Requested	
Sample ID		Date	Time	Matrix	No. Containers
J8-C5	1/23/17	15:08	sed	1	✓
J8-e2	"	15:26	"	1	✓
J8-a2	"	14:41	"	1	✓
J7-a2	"	09:37	"	1	✓
J7-e2	"	09:55	"	1	✓
J7-c5	"	10:19	"	1	✓
K7-a4	"	11:04	"	1	✓
K7-c5	"	13:55	"	1	✓
K7-e2	"	14:13	"	1	✓
K8-c5	"	16:05	"	1	✓
Comments/Special Instructions		Relinquished by: (Signature)		Received by: (Signature)	
Printed Name: Tim Thompson		Printed Name: MARIO LOPEZ		Printed Name: MARIO LOPEZ	
Company: SEE		Company: CH2M HILL		Company: CH2M HILL	
Date & Time: 1/24/17 1315		Date & Time: 1/24/17 1315		Date & Time: 1/24/17 1450	
		Relinquished by: (Signature)		Received by: (Signature)	
		Printed Name: Karen Norton		Printed Name: Karen Norton	
		Company: TechLab Inc		Company: TechLab Inc	
		Date & Time: 1/24/17 1450		Date & Time: 1/24/17 1450	

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, notwithstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number:	Turn-around Requested:
ARI Client Company: EPA - Region 10	Phone:
Client Contact: Heleen Buttcher	
Client Project Name: East Eagle Harbor 2016 Monitoring	
Client Project #:	Samplers: HQR/SEE/MES

Page: 2 of 3	
Date: 01/24/2017	Ice Present?
No. of Coolers:	Cooler Temps:



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 Analytical Chemists and Consultants
 4611 South 134th Place, Suite 100
 Tukwila, WA 98168
 206-695-6200 206-695-6201 (fax)
 www.arilabs.com

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested	Notes/Comments
K8-a4	1/23/17	15:48	sed	1	✓	
K8-c5	1/23/17	16:05	"	1	✓	
K8-e2	"	16:25	"	1	✓	
L8-e2	1/24/17	09:09	"	1	✓	
L8-a4	"	09:22	"	1	✓	
L8-c5	"	09:48	"	1	✓	
J9-b3	"	10:15	"	1	✓	
J9-b4	"	10:35	"	1	✓	
J9-c3	"	11:00	"	1	✓	
J10-b2	"	11:50	"	1	✓	

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Tim Thompson	Printed Name: MARIO LOPEZ	Printed Name: MARIO LOPEZ	Printed Name: Karen Norton
	Company: SEE	Company: CH2M HILL	Company: CH2M HILL	Company: Fech Law Inc
	Date & Time: 1/24/17 1315	Date & Time: 1/24/17 1315	Date & Time: 1/24/17 1450	Date & Time: 1/24/17 1450

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Chain of Custody Record & Laboratory Analysis Request

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ARI Client Company: EPA - Region 10	Phone:	Date: 01/24/2017	Ice Present?
Client Contact: Helen Bottcher		No. of Coolers: 1	Cooler Temps:



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[illegible]

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